

# Ludic Challenges For New Heritage and Cultural Tourism

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Professor Erik Champion

**Word count: 282**

There is a huge amount of influence, coverage and profit in the world of computer games. In 2014 Microsoft bought Minecraft for 2.5 billion US dollars. In 2015 Minecraft became the second highest selling game of all time, at \$54 billion USD (GameCentral for Metro.co.uk, 2015; Mojang, 2015). I am not suggesting that Minecraft is a viable framework for many virtual heritage projects, it is both slow and very low-resolution but the way in which the young can learn to participate and design their own levels in the game is truly extraordinary. So, given their success for entertainment and even for school-based education (Anon, 2015), why have we not successfully applied computer games knowledge to the successful dissemination of virtual heritage projects? Computer games can offer open-ended learning experiences as well as provide counterfactual histories but they don't scale easily and they are not cultural learning experiences in a strict definition of culture. How do we thematically include conjecture and interpretation? How can game technology be used to creatively connect to archives and scholarly infrastructures in general in order to further virtual heritage as both a preservation and communication medium? And how can these projects be made more accessible to the general public?

In this short talk I will first outline why I think the fundamental problem is more an issue of limited interaction design and a conflation of digital heritage (as a preservation medium) with virtual heritage (as a communication medium). I will then provide examples of computer games, interactive tools and virtual heritage environments that attempt to address the above questions both for virtual heritage projects and for heritage content that may be more engagingly integrated into cultural tourism applications.

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Major point:

Games are game-style interaction (challenges, rewards and punishments, fantasy, imaginative, game-technology, specific game genres).

Game advantages	Specific Features	Relevance
Interaction	Challenge-based feedback system: Obstacles, Rewards, Punishment	Learn by failure, inbuilt tracking mechanisms,
Game-specific technology	Joysticks, thematic peripherals (driving, shooting), 3D tracking	Thematic, mobile, robust, varying ease of use, more reactive, economical
Audience-specific	Specific audiences, tailored levels of difficulty	Understanding and sharing between specific types of playing styles and user preferences
Game-genres	Finding, digging, building	Mostly point and shoot, violent

Cite: 2001 paper

Involve projects:

1. Biofeedback and Buddhism

Outline:

Major questions

## 21-9-2015 Questions to Professor Stefano Campana

1. HIVE surround displays and models and schematic GIS data-can there be developed interfaces to allow museum audiences interactive access to GIS data etc? Direct or filtered access?
2. World Wide Web 2017 in Perth Western Australia-is there interest between archaeologists spatial scientists and Web programmers to re-examine web3D WebGL GeoVRML and other open standards?
3. UNESCO chair-integration of built heritage and landscapes-could a 3D web format be suitable as an archive format and vice versa?
4. Could there be any applications deriving from the above but designed for cultural tourism objectives? Maybe on mobile technologies? NB giving talk in Delphi 24-26 Sept on cultural tourism.
5. Has research/GIS software or formats looked at ways of conveying levels of certainty or uncertainty?
6. In Italy or the UK do you run courses using drones and film and scanning techniques? Would there be suitable interested audiences?

*We cannot afford to have our digital heritage disappearing faster than the real heritage or the sites it seeks to 'preserve' otherwise all of our technological advances, creative interpretations, visualizations and efforts will have been in vain." [Thwaites, Harold. "Digital Heritage: What Happens When We Digitize Everything?" Visual Heritage in the Digital Age. Springer London, 2013. 327---348.]*

### Learning problems: how to

- preserve and integrate 3D/multimedia
- access and ownership of models, sites & paradata
- lack of guidelines and shared procedures
- no shared standardised evaluation data
- audience issues

### Options

- Re-record everything (3D capture) accurately or agree on labelling.
- Template or provide framework to support / record sites (from charter?)
- Immersive explanation of every 3D site.
- Policies to encourage use/re-use of 3D models.
- Collection and dissemination network.
- Store models, base components, paradata, or embed exes? See <https://olivearchive.org/> "for long-term preservation of software, games, and other executable content."

### Incentives

- provide showcases; critical mass for funding
- use in teaching; wider range of audiences;
- prizes awards or other recognition
- long-term depository
- citation and dynamic linking may be possible

- Modification of CC for 3D models and sites
- Changes to copyright system based on levels of detail or components

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